

The Bone – Deformation of the Transversal Arch

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Abstract:

The deformation of transversal arch represents one of the “flat foot” types, namely when the arch, while descending, is losing its amortizing function. Transversal arch is the most loaded of all feet arches, and one of the main reasons for this extreme load is using of high-heeled footwear (as General Centre of Gravity (GCG) for the body is shifted to the front).

Key Words: toe; knee muscles.

Introduction:

It is known that the largest loads emerge when body movement is provided by forces of inertia. Numerically we speak about thousands of kilograms, whose effect is directed not along the toes but under the definite angle to them (when we walk turning the feet outwards). Footwear with narrow toe chamber deprive the muscles of its contraction ability – consequently they lose their muscle tone soon enough. Heads of 2nd and 3rd metatarsal bones begin to descend while pushing aside and widening the foot in its transversal cross-section. Metatarsal bones together with joints of 1st and 5th toes are moving aside by the forces (F) on the level of heads of metatarsal bones and toes. Not considering laws of mechanics, the surgeon fixes bones at the base of metatarsals (with aim to immobilize them), but the objectively existing forces F are not compensated in any way. There are 400 various types of these surgical operations, but all of them are not able to improve the situation. It is so because neither objects of correction nor location of procedures are right, and moreover – the feet muscles carcass is being destroyed by these procedures. Come to think of it – muscles are severed, the joint is completely cut off and removed. Everybody understands (hopefully!) that this demonstrates the inevitable way to lose ability to run and jump, i.e. the sure way to become partially disabled. As the result of such surgeries, deformations development becomes uncontrollable process, the muscles stop working properly and stop being able to compensate the load.



But, contrary to surgery, as you see on the photographs, the toes came to normal positions after several appointments of definite dealing with the muscles. Notice that the 2nd toe is shortened because previously the head of its metatarsal bone was surgically removed. This woman could not bear her body weight on this foot, and she was suggested to surgically remove the head of the bone of the next neighboring toe of the foot. It is difficult to comprehend the logical approach of the surgeon, but it is much more difficult for the person to live and not be able to just walk. The process of walking, the working of the toes muscles are the basic foundation for blood and lymph circulation in the entire human organism, but alas! – it so happened that the doctors are not aware of this fact.



There is one else important issue in toes correction – the footwear. Any type of shoes or boots must not provide possibilities to deviation of the big toe and to decreasing its mobility. We do not forbid to use the fashionable model footwear of narrow sophisticated shape. But it is necessary to understand that it is not for casual everyday usage, but only for 3-4 hours a week. For this footwear it is imperative to insert the so called half-orthotics that supports the transversal arch. The human legs are not only the handsome part of the body, but they are great useful workers as well. Our lower limbs provide and secure the overall human health and therefore they need regular daily care: massage and contrast temperatures bathes.

Let us consider how we walk and in what sequence the muscles contract, – on both of these factors the effectiveness of blood transportation to the heart depends. Physiology definitely and firmly states that heart deficiencies, coldness in the feet, varicoses, swelling and actually the whole variety of diseases of internal organs are connected with discrepancies and failures in the cellular metabolism. The underlying reasons for metabolic disorders are deformations. The toes muscles are the mightiest in the system of venous-muscles pumps. That's why it is not reasonable and also unwise to permit their deformations, cutting-off and severing in any way.



Note that if feet deformations are present, it definitely means that there are deformations observed in the body structures that lay above: in lower limbs joints, in lower back and in vertebral column or spine as a whole. It is exactly with deformations that the following problems and malaises are connected: bones wearing off on the joints surfaces (arthrosis and arthritis), painful sensations in knee and hip joints, in different parts of the spine, headaches. Osteoporosis follows the decreasing of physical activity. It is obvious that the whole chain of unpleasant problems stems from the minor and ordinary at the first glance deviation of the toe. Prophylactic and prevention of the disease is always easier and cheaper than visiting doctors afterwards with lack of success. It is only our unfortunate and mistaking impression that medical practise is almighty and can work miracles. Try to rely on your knowledge and your education, that must not be confined to the narrow and specific frame of thought. Remember that like we this or not, human organism is the self-regulating system. Far more often than not it is pretty much enough to eliminate the deformations, to begin to walk properly, and in few days you would feel improvements in your organism functioning. At first the patients observe these fortunate transformations with reserve and distrust – we became so used to prescription drugs...But very soon afterwards the patients reveal with pleasure and amazement the personal health improvements that they observe after the functional correction of their locomotor systems.



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